

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :			
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12751161
		Catalog # :	00536ET3E184T-S
Frame	: 182/4T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 82.2 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.2079 sq.ft.lb
Design	: B		
Output [HP]	5	5	5
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	11.8/5.90	14.3/7.17	12.8/6.81
L. R. Amperes [A]	92.0/46.0	91.8/45.9	91.2/48.4
LRC [A]	7.8x(Code J)	6.4x(Code G)	7.1x(Code H)
No load current [A]	4.40/2.20	4.34/2.17	4.39/2.33
Rated speed [RPM]	3500	2860	2875
Slip [%]	2.78	4.67	4.17
Rated torque [ft.lb]	7.50	9.18	9.13
Locked rotor torque [%]	220	180	200
Breakdown torque [%]	300	250	280
Service factor	1.15	1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	30s (cold) 17s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%	87.2	89.3
	50%	87.5	88.1
	75%	88.5	87.8
	100%	88.5	86.2
Power Factor	25%	0.49	0.52
	50%	0.76	0.79
	75%	0.85	0.87
	100%	0.89	0.91
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6205 ZZ	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 122 lb
		Max. compression	: 204 lb
Lubrication interval	: -		
Lubricant amount	: -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 13.1A SF 1.00 SFA 13.1A			
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.		These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.	
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



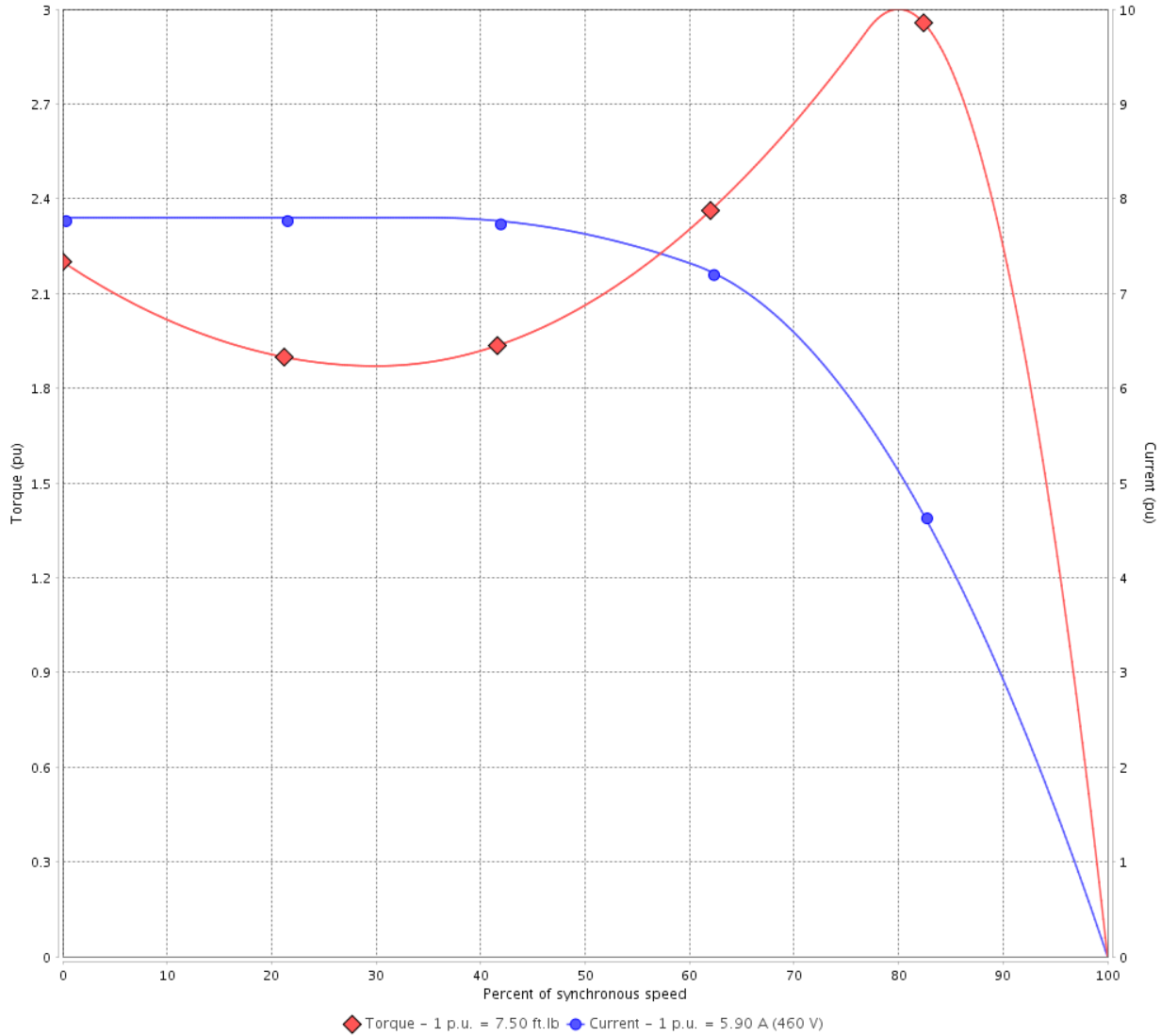
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12751161

Catalog # : 00536ET3E184T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 11.8/5.90 A
 LRC : 7.8
 Rated torque : 7.50 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 30s (cold) 17s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



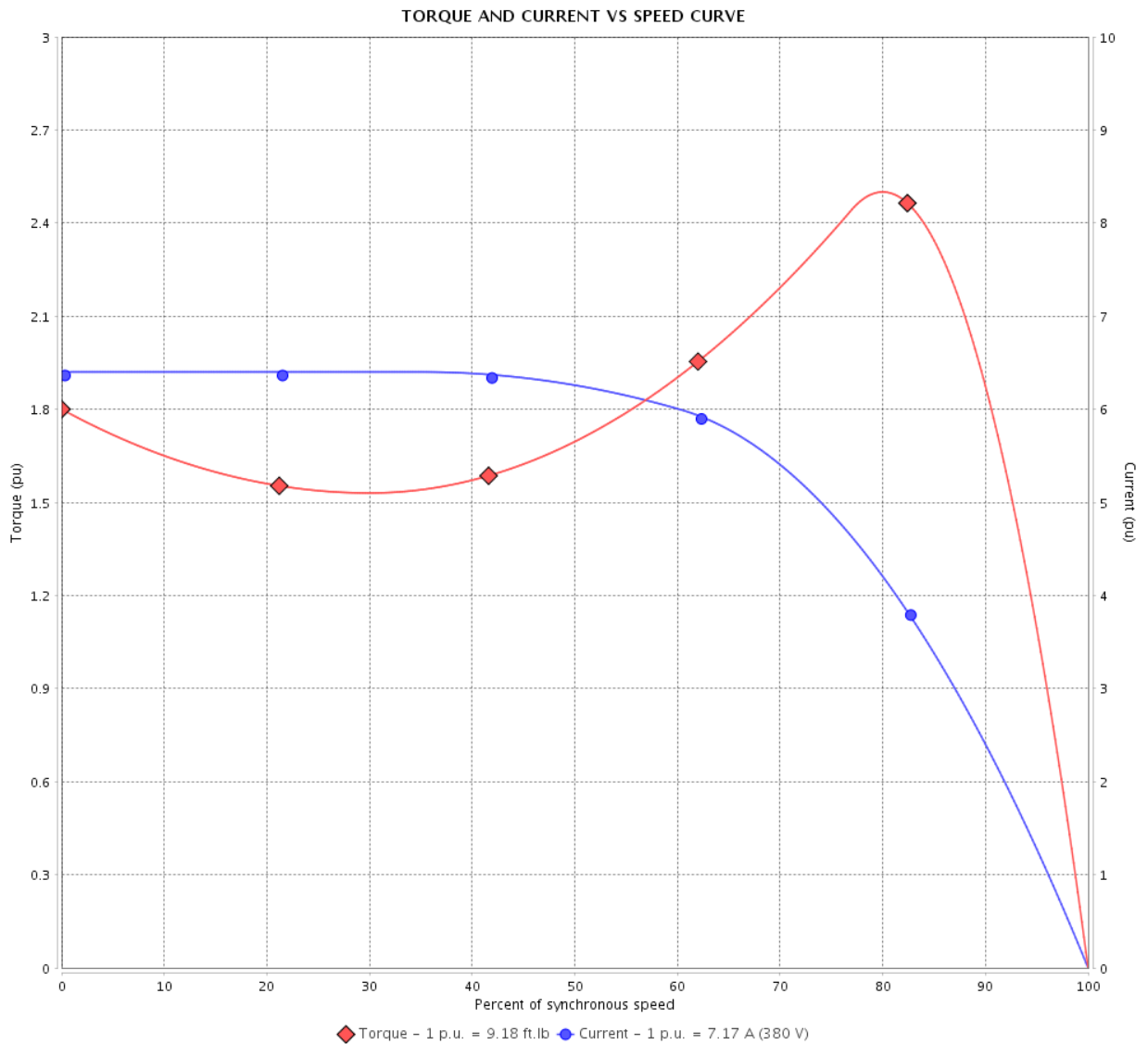
Three Phase Induction Motor - Squirrel Cage

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Performance : 190/380 V 50 Hz 2P

Rated current : 14.3/7.17 A
 LRC : 6.4
 Rated torque : 9.18 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 250 %
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Locked rotor time : 0s (cold) 0s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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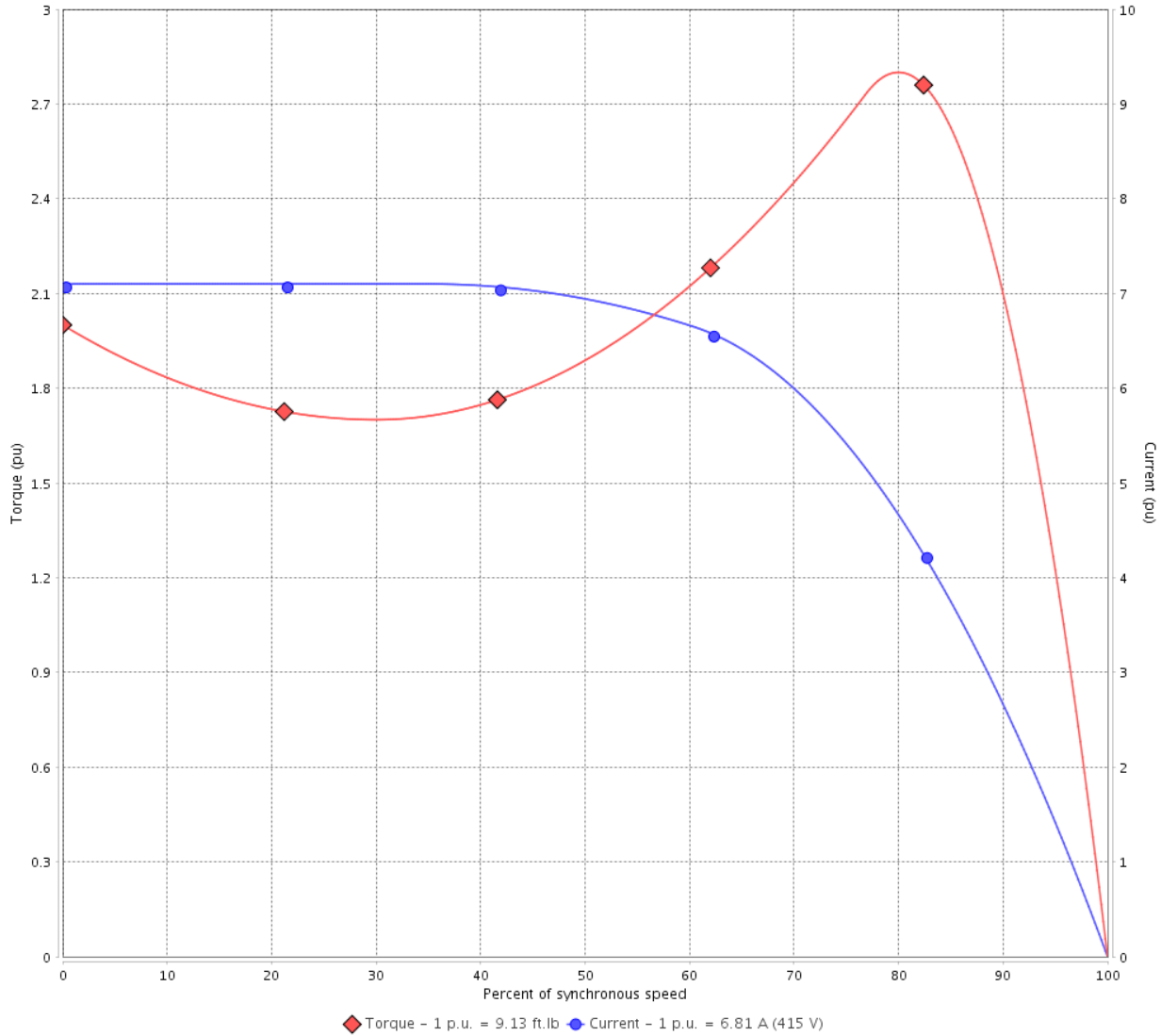
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 12.8/6.81 A
 LRC : 7.1
 Rated torque : 9.13 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 280 %
 Rated speed : 2875 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Locked rotor time : 0s (cold) 0s (hot)

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LOAD PERFORMANCE CURVE

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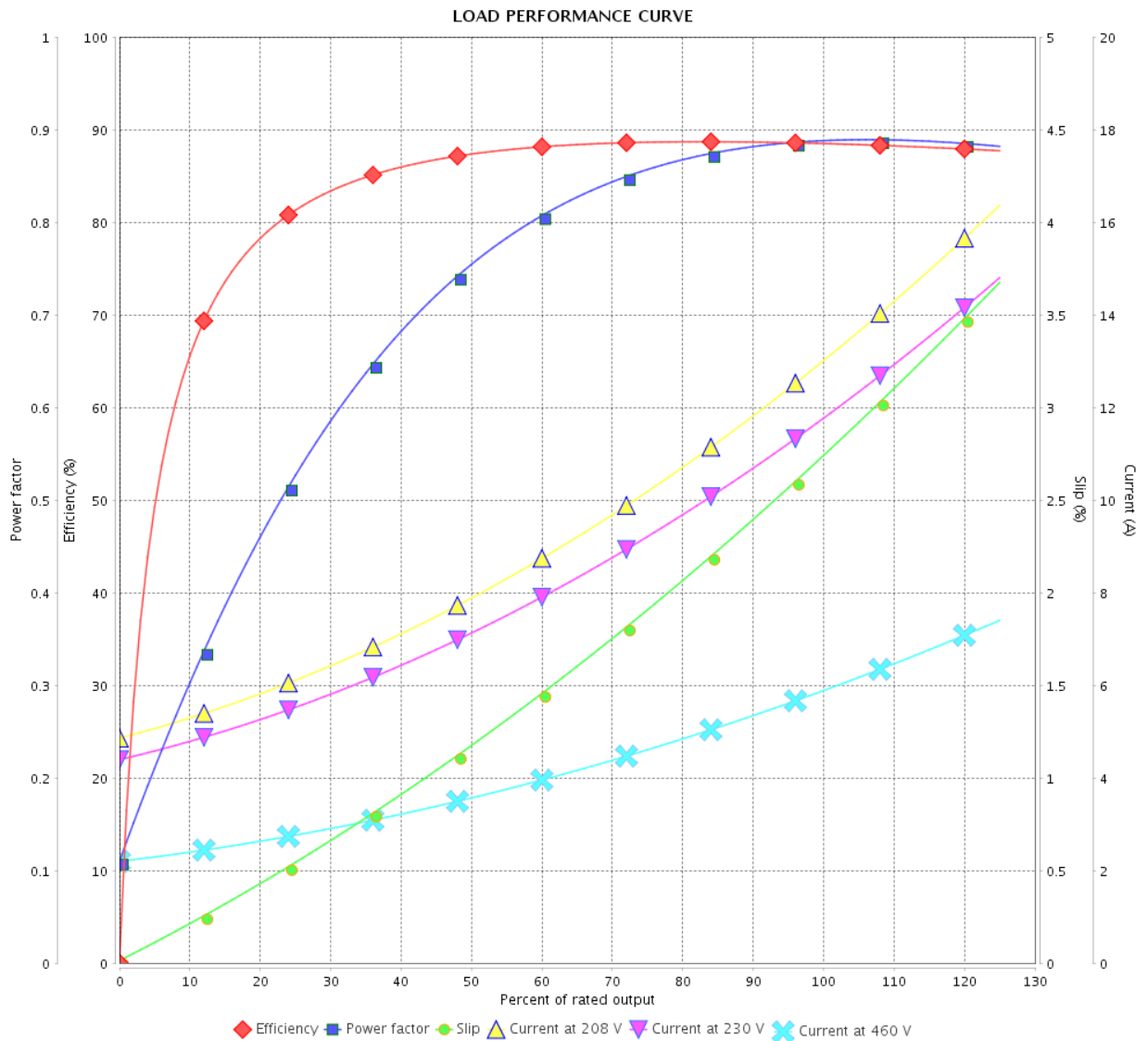


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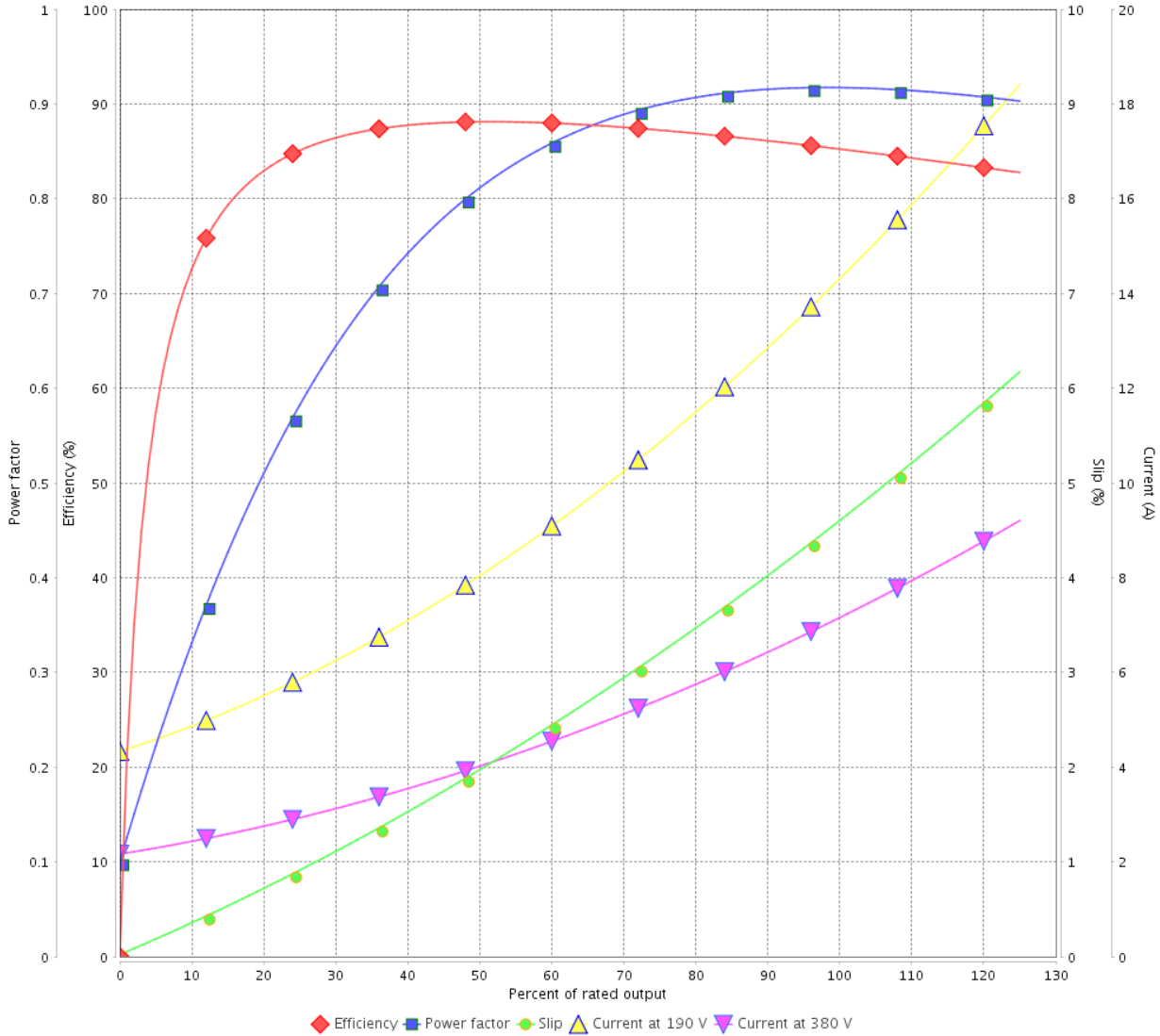
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 LRC : 6.4
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 Locked rotor torque : 180 %
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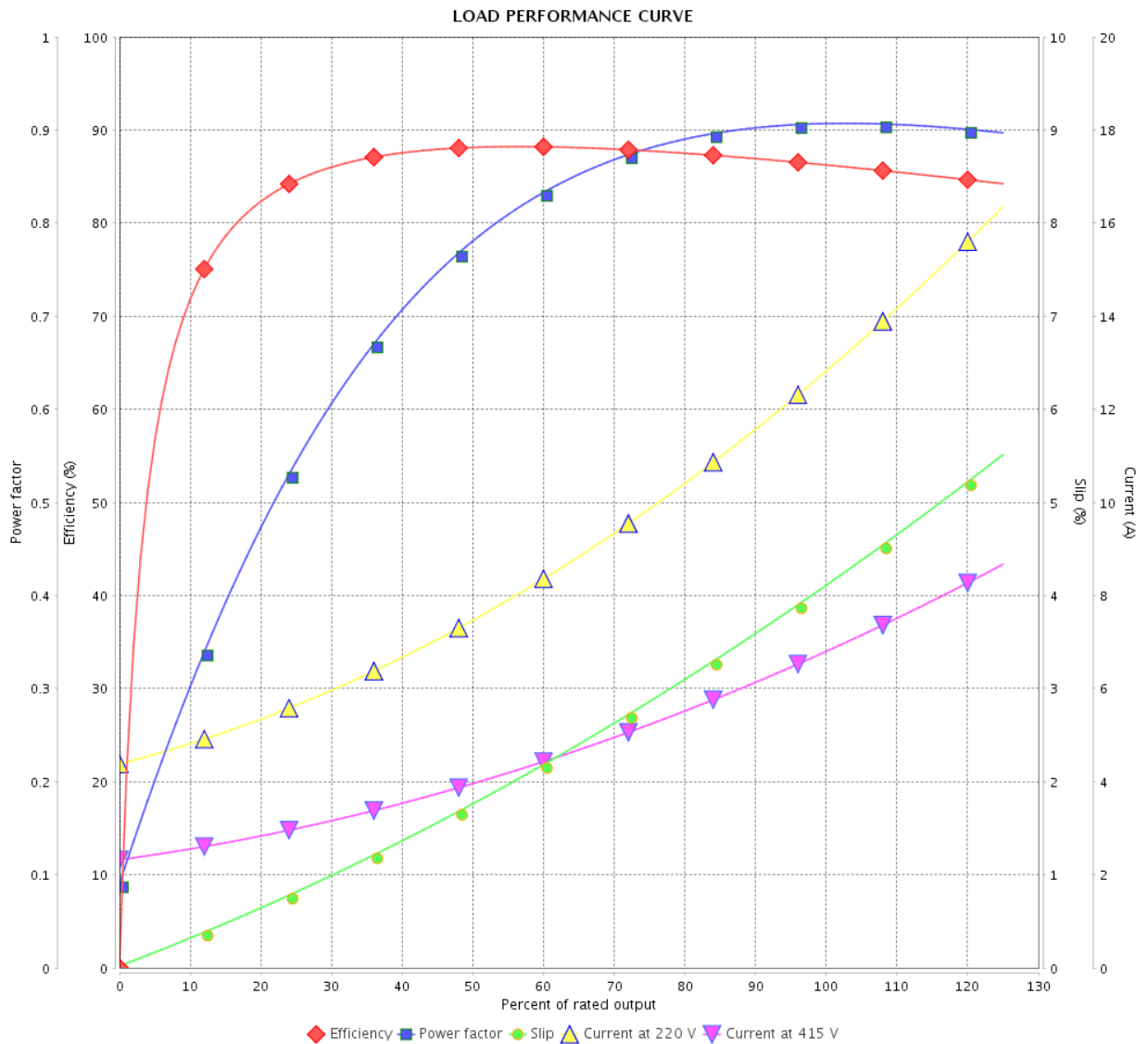


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THERMAL LIMIT CURVE



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LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 7.50 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm	Design	: B

Heating constant

Cooling constant

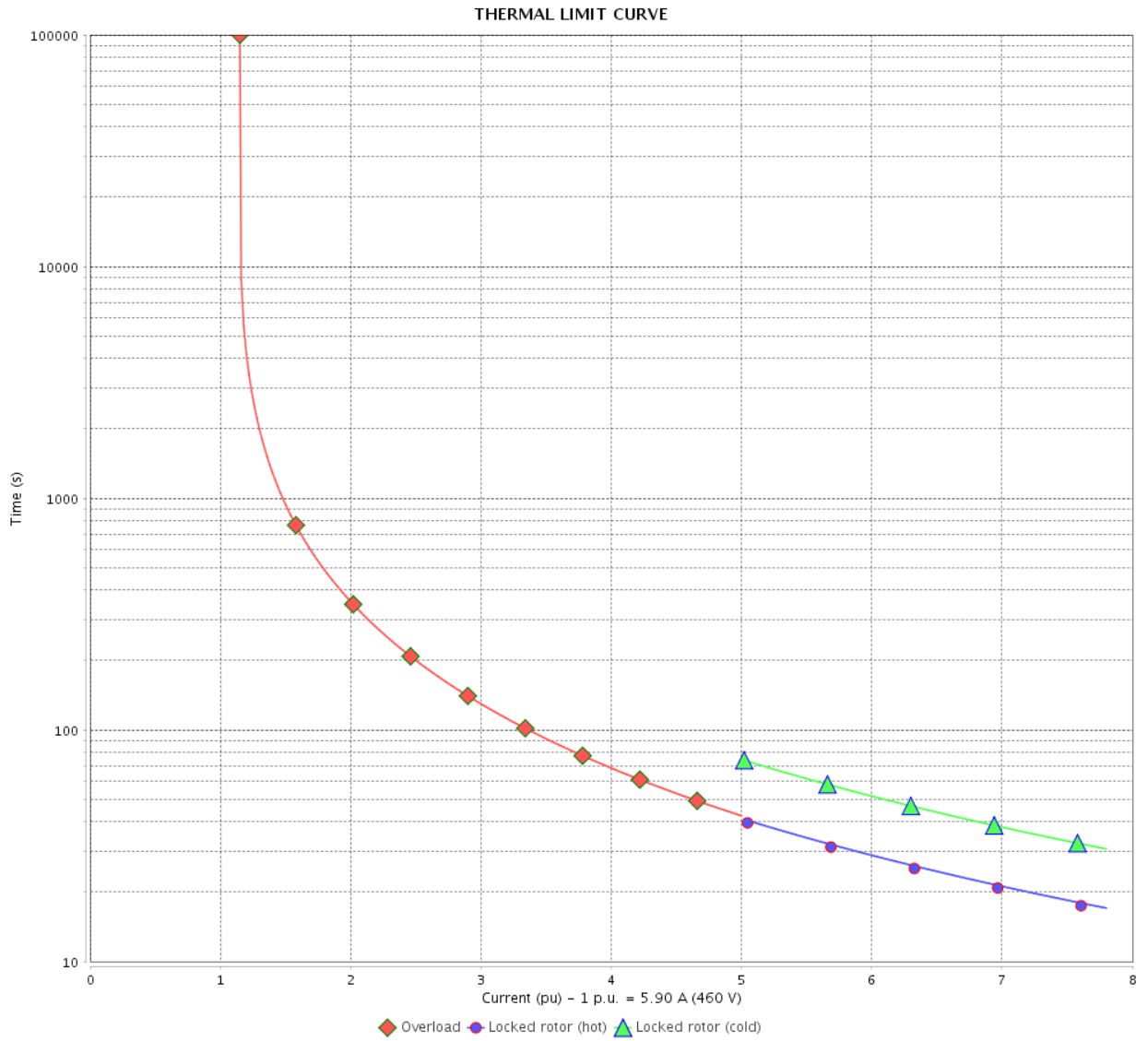
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Rated current	: 14.3/7.17 A	Moment of inertia (J)	: 0.2079 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 9.18 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 2860 rpm	Design	: B

Heating constant

Cooling constant

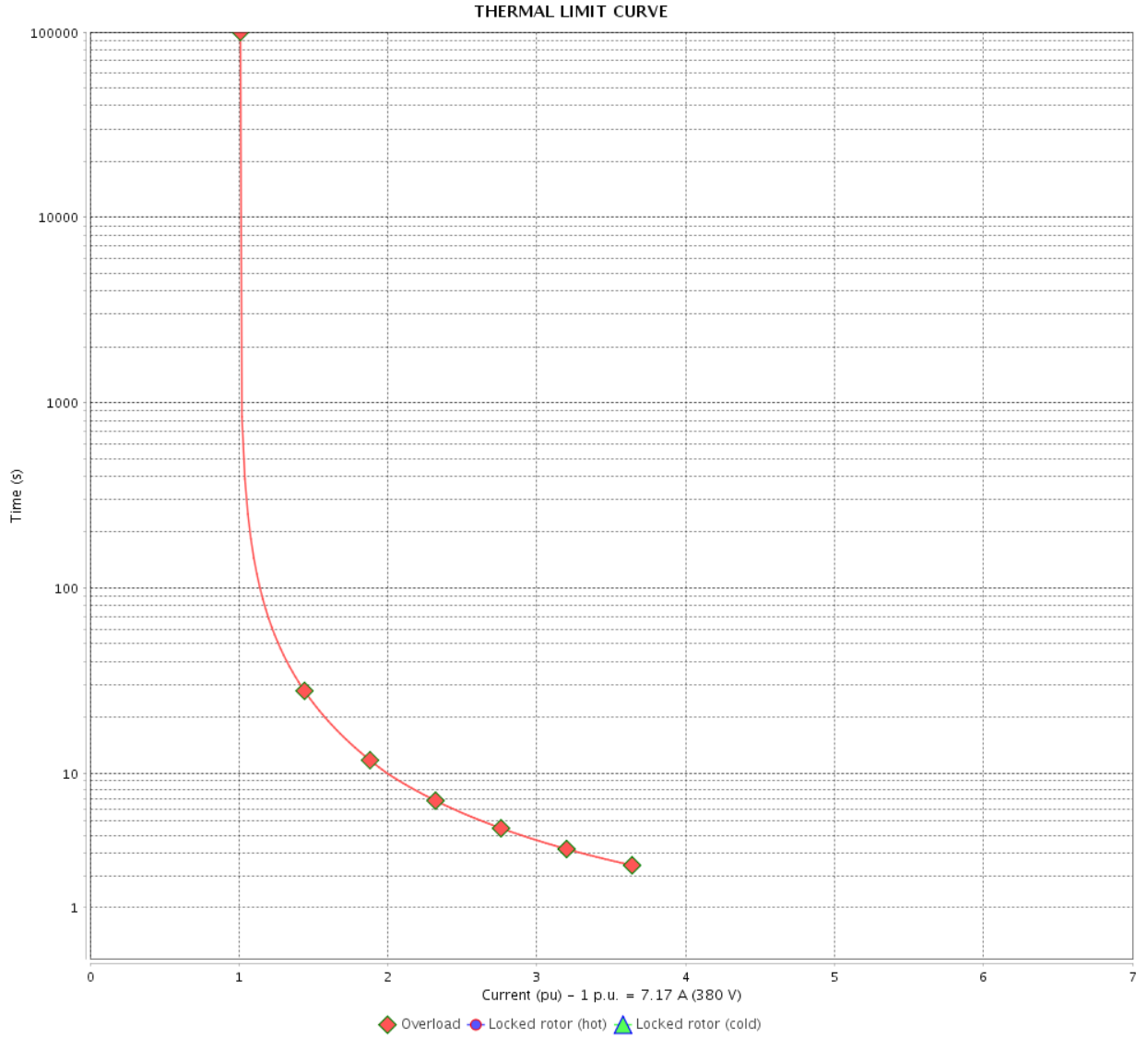
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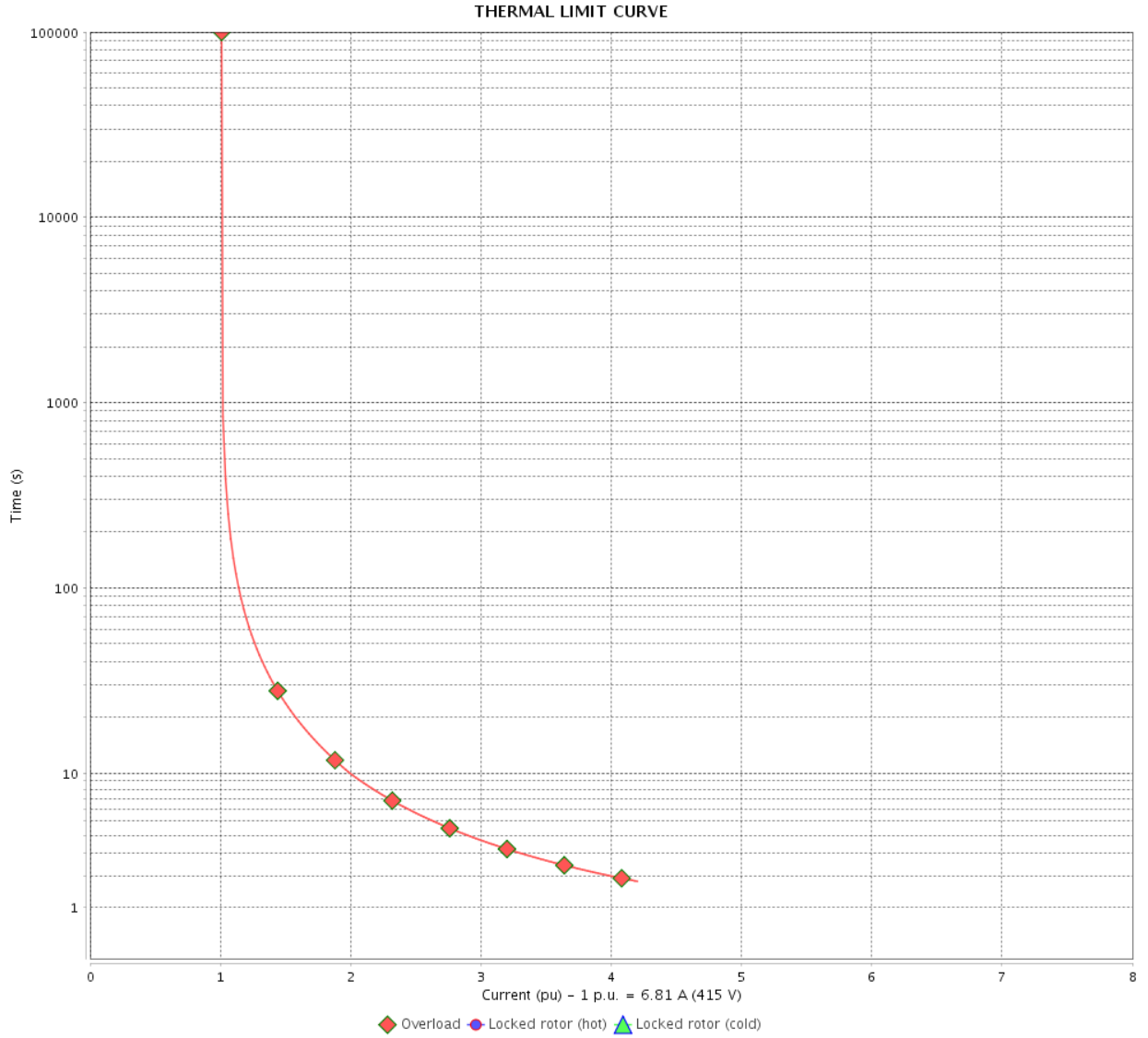
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VFD OPERATION CURVE

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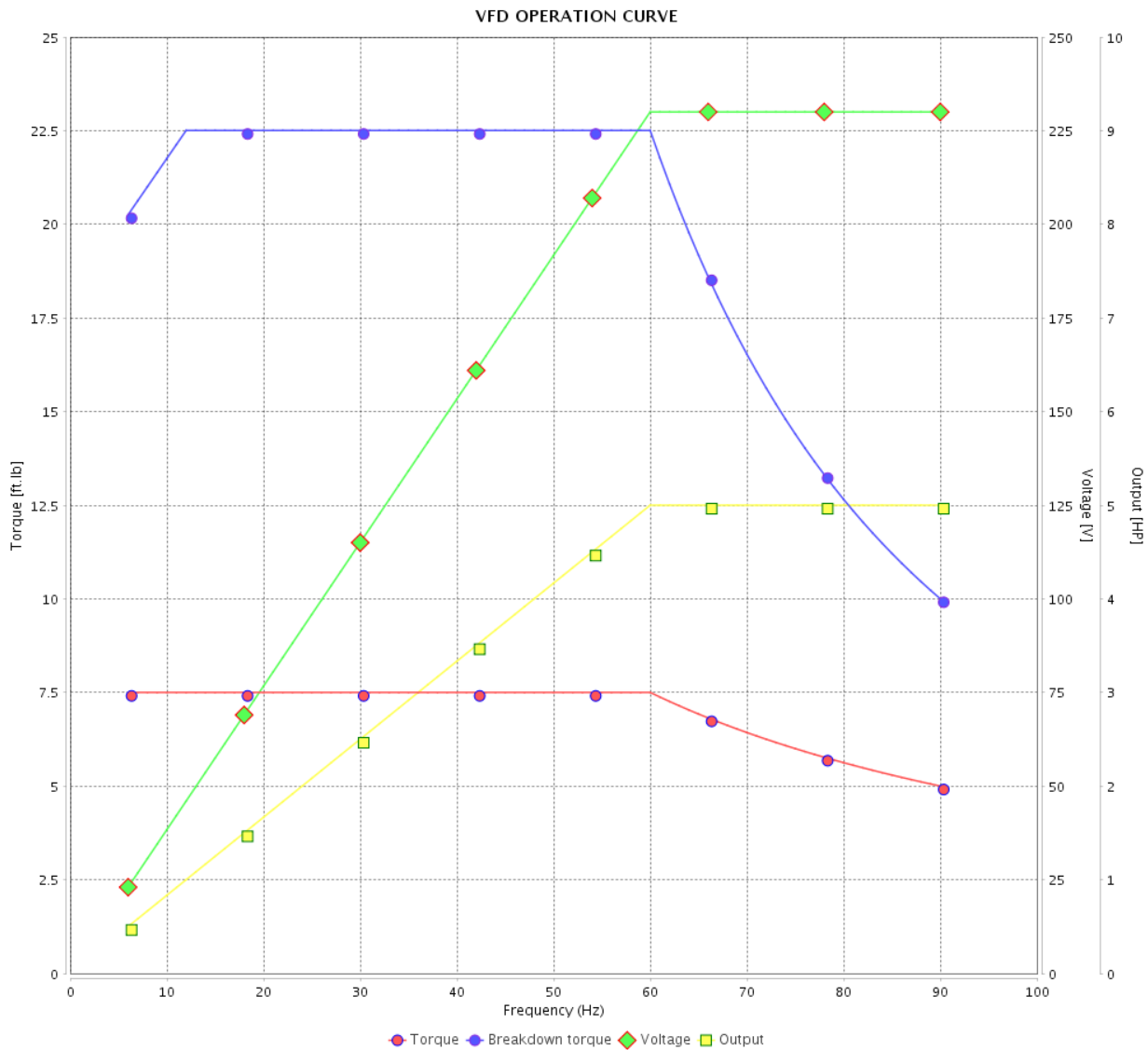


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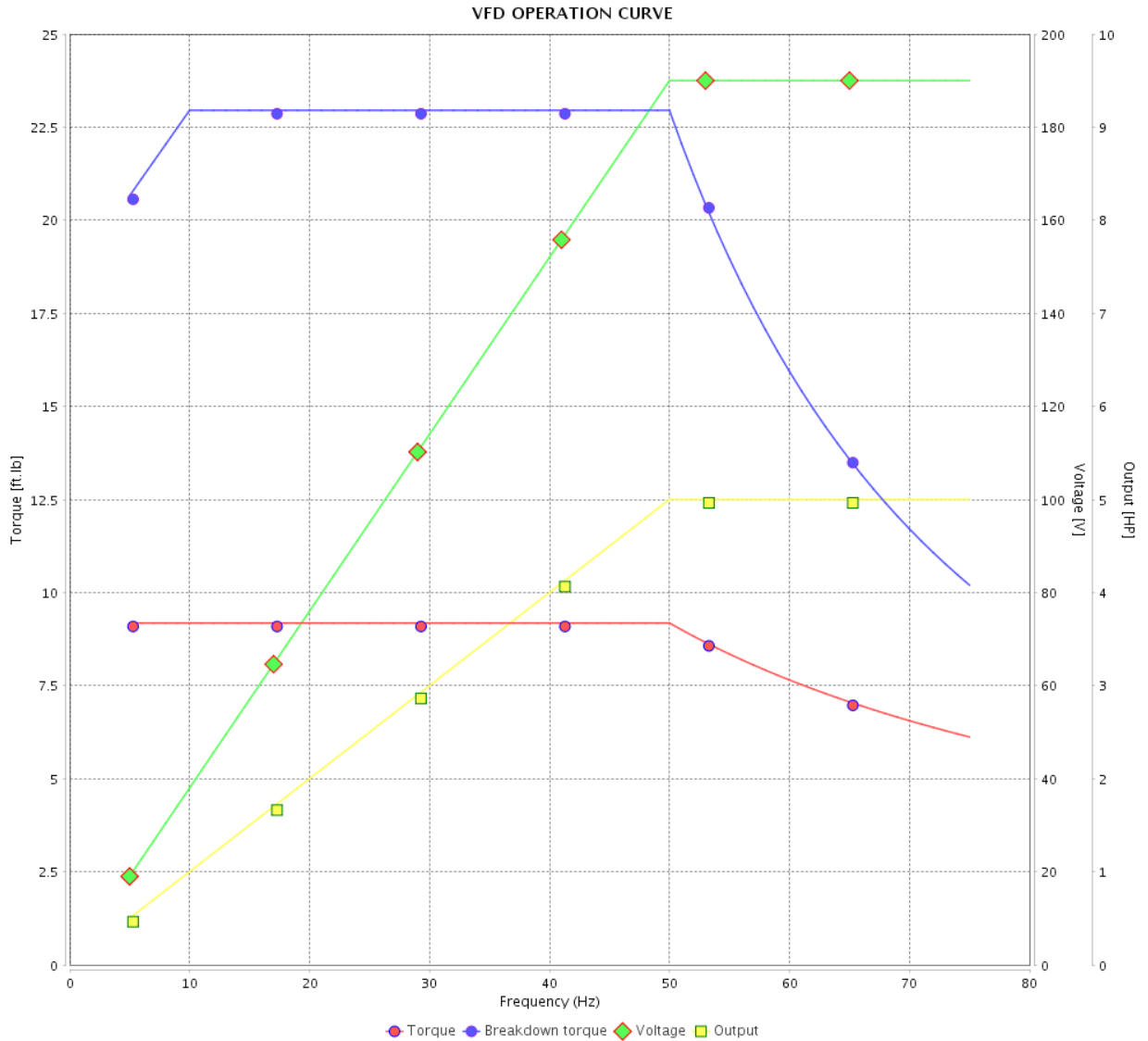


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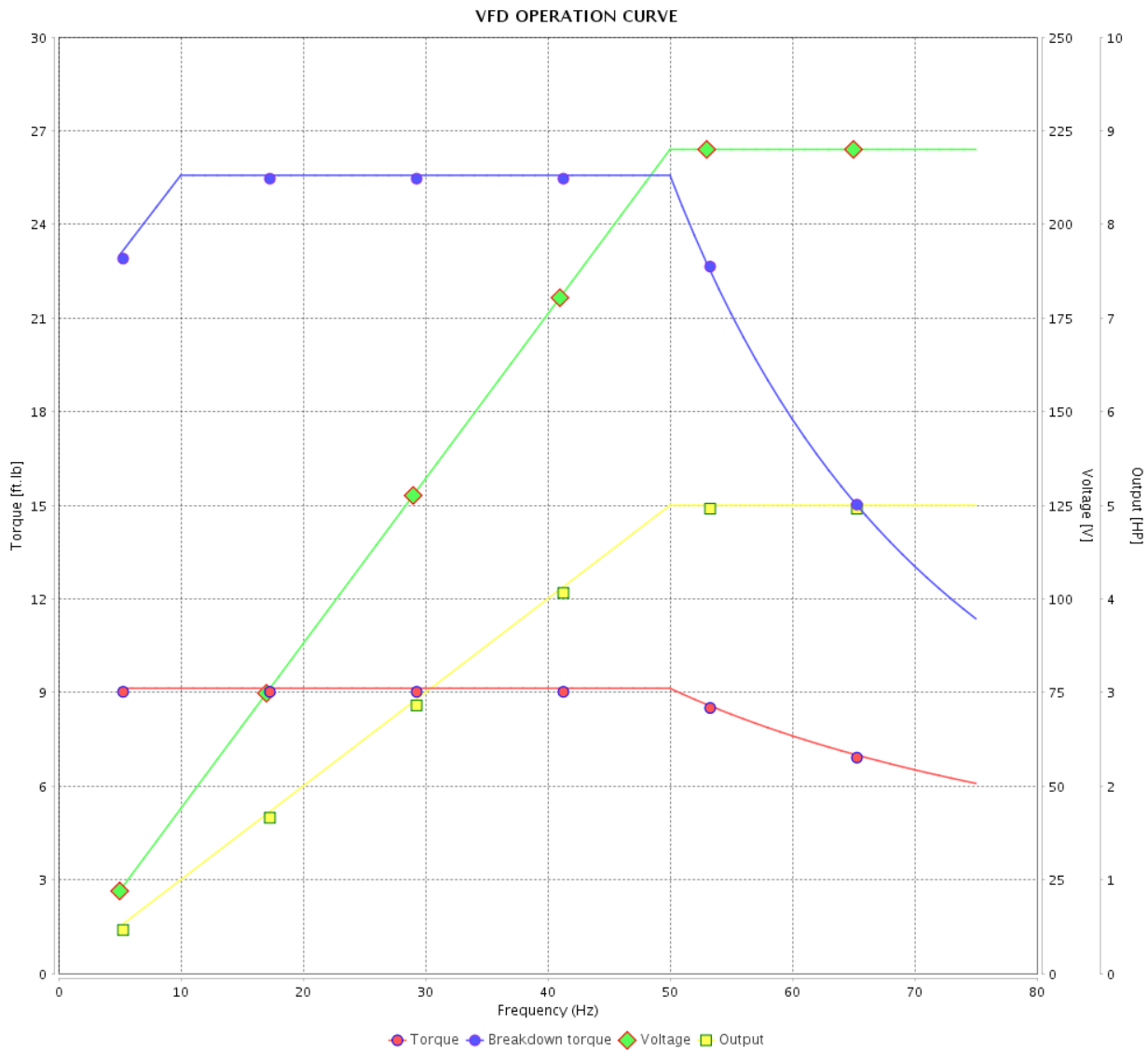


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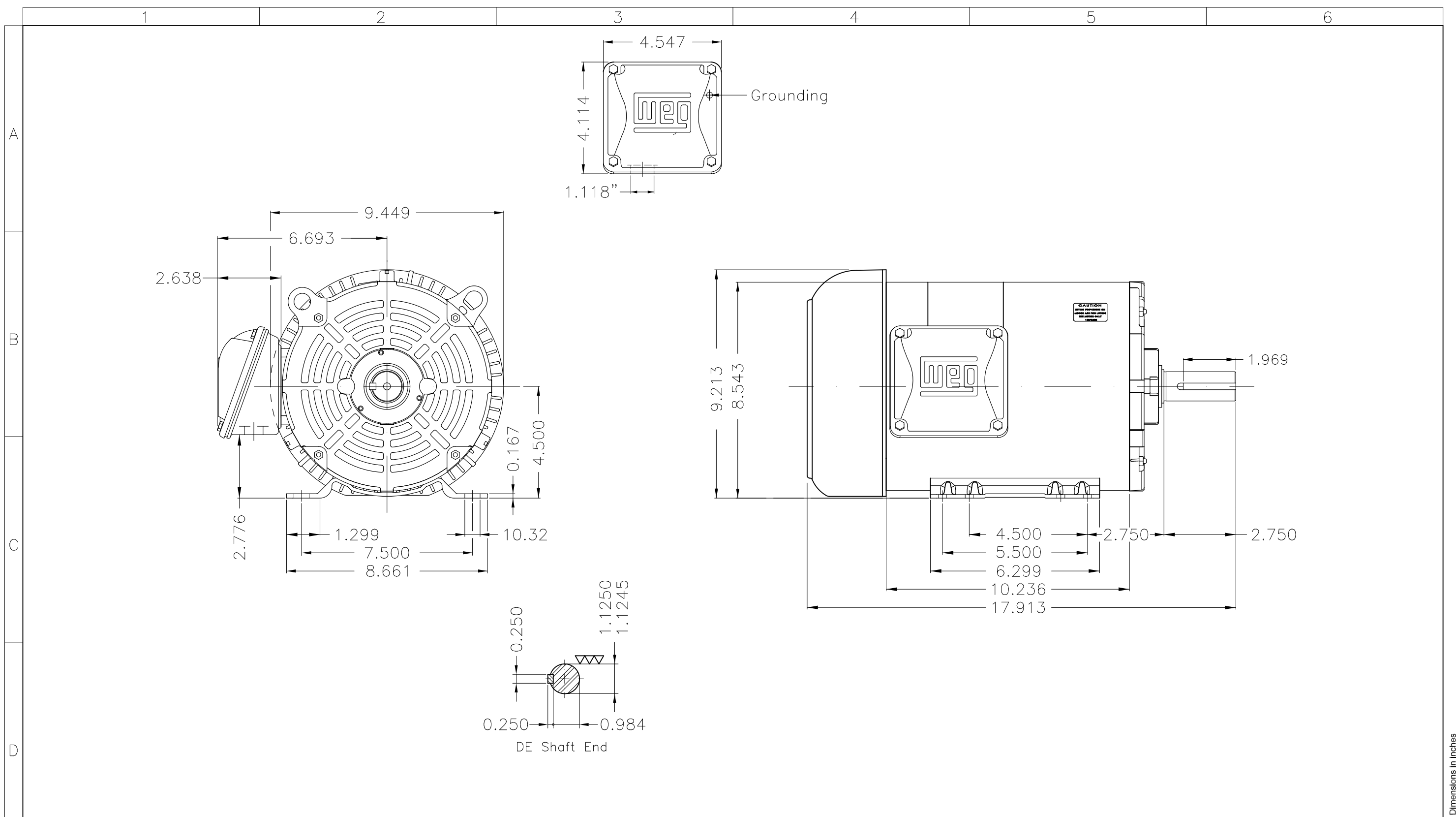


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Dimensions in inches XME A3

Color Munsell N 1 matte black											
Painting plan 207N											
Mounting F-1/B3R(D)											
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.					PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 182/4T IP55 TEFC									
RELEASED											
REL DT.		WMO	Jaragua do Sul	Product Engineering							

5 HP 02 Poles 60 Hz



NEMA
Premium



MADE IN MEXICO

MAT: 127511161 CC029A

W01.TE0IC0X0N

HT005402NPW0 1

06APR2022 S/N:

**For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)**

CT 2:1/VT 1000:1

PH 3	Hz 60	HP 5.0
FR 182/4T		KW 3.7
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 11.8/5.90
INS CL F AT 80K	IP55	SFA 13.6/6.79
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE J	PF 0.89
USABLE @ 208V 13.1A		RPM 3500
SF1.00		NEMA NOM. EFF 88.5%

ALTERNATE RATING: 5.0HP 50Hz 190-220/380-415V SF1.00
14.3-12.47.17-6.59A 2860RPM EFF 85.2% (IE1) IEC 60034-1

For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT

DE 6206-ZZ	ODE 6205-ZZ	MOBIL POLYREX EM
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INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



AVERTISSEMENT: Le moteur doit être mis à la terre conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

